

ABSTRACT

A single fluid lithographic printing ink composition includes a hydrophobic phase and a hydrophilic fluid phase. The hydrophilic fluid phase contains water or a liquid polyol or both. The hydrophobic phase contains a hydrogen bonding vinyl polymer that can hydrogen bond with the hydrophilic fluid phase. The vinyl polymers are preferably branched, but remain soluble in the hydrophobic phase. The invention provides stable inks that can be used as single fluid inks with excellent fountain stability and resistance to toning.

1. A single fluid lithographic printing ink composition comprising:
 (a) a hydrophobic phase;
 (b) a hydrophilic fluid phase containing water or a liquid polyol or both;
 (c) a hydrogen bonding vinyl polymer in the hydrophobic phase that can hydrogen bond with the hydrophilic fluid phase;
 (d) the vinyl polymer is preferably branched, but remains soluble in the hydrophobic phase;
 (e) the invention provides stable inks that can be used as single fluid inks with excellent fountain stability and resistance to toning.